

Navigating the CPEC Customized Reports System

The CPEC Customized Reports System is a boon to some, a burden to others. It is our second-generation tool, which has matured tremendously. Our SQL servers are queried based on what you select and the result is returned to you. Are you getting what you need? Read this article to help you understand this incredible system. We take you from how to select your criteria to downloading the data, to creating a pivot table in Excel. Are you ready for adventure?

What can I do with the Customized Reports System?

The Customized Reports System is designed for the generation of fully-customized data reports. The options available in each report vary but the technique for customizing is the same throughout. On most computers, a new browser window will be opened with the report data. This makes it easier to go back to the report configuration and make changes to show a different set of data or a different aggregation.

How do I generate a report?

First, let's look at the general view from 30,000 feet. Then we'll step you through the most common request we receive – First-Time Freshmen.

To generate your report, select the category of data (enrollment or degree/completion) from the first page. Then select the primary aggregation of the data. Click on Select Final Options to customize the report. Here is some general information about some of the options:

For most reports, if no changes are made on the **Select Final Options** page, the report will include statewide data for the most recent year, the primary aggregation, and the student count. For example, Enrollment by Student Level will include the year, a list of the student levels, and the count of students at each level. The primary aggregation can be unselected so that only the year and the student count are returned. If you are not sure what you need, start with the default report and add in options one at a time.

The default Time Frame selection for all reports is the most recent year. This will vary depending on the report and the source of the data. Options are provided to select the previous ten years of data, five-year segments of data, and individual years.

The "**Aggregate (Group) Data**" section defines which **columns** will appear in the report. All reports include options to add the student's gender and ethnicity and information about the institution attended by the student. Other options are determined by the other information available in the table. Any information wanted in the final report, such as the institution's name, should be selected here.

The "**Include Only ...**" sections provide **filters** for the data. Drop-down lists are provided for some elements such as California counties and regions. For others, a text box is provided for entering search criteria. Advanced search capabilities such as using "And" and "Or" are supported for most of the text boxes.

For some reports, there are some additional data elements available that are directly tied to other elements in the report. For example, when running a report that includes the Discipline / Instructional Program option, the CIP Code (Classification of Instructional Program Code) can be added to the final report.

In general, the more options selected or changed in the configuration of the report, the larger the report will be and the longer it will take to run. If a report is more than about 300 rows, only part of the report will be displayed in the browser. The entire report can be downloaded for analysis.

NOTE: It is possible to configure a report that is too large to be generated. In these cases, the report can be broken into smaller segments by selecting a single year at a time; a single region, county, or higher education system; or reducing the number of columns.

The Sea Level View or All I Ever Wanted to Know...

Okay, let's Do It. Roll up your sleeves and grab your keyboard. Here is the data we want:

"...I need to know how many Sacramento high school graduates from Hiram Johnson and Thurgood Marshall went to a UC, a CSU or a Community College in 2005. Oh, I would also like to know the college-going rate!"

First off, CPEC does not calculate a **college-going rate** because it can be defined in a number of ways. The Customized Reports system will provide the number of Fall, first-time freshmen that originated at a particular high school in a given year and the number of high school students that graduated earlier in the Spring.

Steps

Go to the [CPEC Customized Reports System](#) where you will observe First-Time Freshmen and College-Going Counts under the Higher Education Enrollment link. Go ahead and click on [Higher Education Enrollment](#).

You are now on the Enrollment Report Selection page. Scroll down and check the **Freshmen at Public Institutions / College Going Counts** radio button (make certain you select Public, not Private), then scroll down to the bottom of the page and click on the **Select Final Options** button.

You are now on the **Select Final Options** page. This is where it all happens. If you scroll to the bottom of the page right now, and click on **Generate Report**, you will get overall counts of public and private high school graduates and First-time college freshmen for the most recent year. Go ahead and try it! A new browser window will open displaying the selected criteria, a button to download the data and the data itself. There isn't very much data there, so close the window and go back to the browser window showing **Select Final Options**.

Time Frame for Data:

We always tell folks to leave the **Year** at the default setting – Most Recent Year. You can always change the year and rerun the report. The data report takes less than a minute to run. We will leave it at the default setting for now. A quick note here – If you use a wheel mouse, click outside of the box anywhere on the page **AFTER** you select a year. This will deselect the highlighted cell. Otherwise the wheel will cause the selected value to change. Keep this in mind when you select other options that use a drop-down list.

Note the [Dates Available for Each System](#) link just below the Year selection drop-down (see Figure 1). We receive many inquiries about “missing data” for a particular year, especially data for the private institutions. Unfortunately these data don’t exist, so make a point of checking this link for each type of report you generate.

Aggregate (Group) Data By:

Many users are not familiar with data terms such as aggregation, disaggregation, or grouping. Everyone is familiar with aggravation. Think of it this way: If you want a column listing the data described, then check the box. It is that easy.

Don’t go crazy and check every box. The more boxes you check, the longer it will take to generate the report. If too much is asked for, the system will time-out and return nothing. Check only what you need. Start small. You can always ask for more. I never ask for gender and ethnicity until I’m sure everything looks good.

We were asked for students that...

“...went to a UC, a CSU or a Community College...”

The names of the institutions are not required; only the public systems so check the **System** checkbox. Check The High School’s **School Name** checkbox to display the names of the schools (see Figure 1).

Time Frame for Data:

Year:

Most Recent Year

NOTE: Not all years have data from all systems, especially in the early years.

Check the Dates Available for Each System in this Report for more detail.

Aggregate (Group) Data By:

The Current Institution's:

☐ Region [g](#)[D](#)
☒ System (UC, CSU, WASC, etc.) [g](#)[D](#)
☐ County [D](#)
☐ Institution Name

The Student's:

☐ Gender [D](#)
☐ Ethnicity [D](#)
☐ Full / Part-Time Status [D](#)
☐ Program Type (Regular, Non-Credit, etc.) [D](#)

The High School's:

☐ Region [g](#)[D](#)
☒ School Name
☐ School District
☐ County [D](#)
☐ Type of School [D](#)

Figure 1

Notice the single letter G and D links to the right of selection items. The G link goes to the glossary and the D link goes to the data element dictionary. Clicking on these will open new windows and provide additional information.

Limiting the Data

The sections that start with “**Include only students...**”, filter the data. This is how the system limits what is returned. The filter options are divided into sections which define logical groupings. These sections are different for the various types of reports that can be generated using the system. You will see a combination of textboxes, radio buttons and drop-down options, depending on what makes the most sense.

Here is another cool feature. Any selection other than the default value and any textbox that has a filled-in value will generate a column based on the description in the report.

Include only Students at Current (Receiving) Colleges or Universities...

The Customized Reports System is flexible enough to generate reports from the viewpoint of where students leave (sending institution or high school), where students arrive (the receiving institution) or both. Consider the following:

“What higher ed institutions did students from high school XYZ go to?”

“What high schools did students enrolled at ABC University come from?”

“How many students from XYZ high school went to ABC University?”

The Customized Reports System can answer any of these questions quite handily. All you need to specify is the receiving institution or system and/or the sending high school (or sending institution in other reports such as Transfer). Recall that our example asks for students that...

“...went to a UC, a CSU or a Community College...”

This means the student was **received** at any *Public* College. Click on the System (UC, WASC, etc.) drop-down and select **Any Public** (figure 2). The All Available Systems option will include all systems shown in the drop-down list. Since only public systems are included in this report, you could also leave the selection set to the default setting.

Include only Students at Current (Receiving) Colleges or Universities that match the following criteria:

Portion of Institution Name:

Institution Region [g](#)[p](#):

Institution County [p](#):

System (UC, WASC, etc.) [g](#)[p](#):

Community College District:

Include only students that match the following criteria:

Figure 2

Include only Students from High Schools that match the following criteria:

Our original request stated:

“...I need to know how many Sacramento high school graduates from Hiram Johnson and Thurgood Marshall...”

We know the city (and therefore the county) of the sending high schools and the name of the high schools. Enter the LEAST number of characters to uniquely identify a high school. Why? George Washington High School might be listed in the database as Washington (George) High School, or Washington High or Washington Senior High School. The common denominator

here is Washington. We will enter **Johnson** for Hiram Johnson High School and **Marshall** for Thurgood Marshall High School. If we get too many schools, we can always rerun the query.

Here is a helpful trick. Multiple schools can be queried simultaneously by separating the partial names with the keyword **OR** (see figure 3). Go ahead and enter “johnson or marshall” (without the quotes) in the **Portion of High School Name** textbox. Enter any number of partial names separated by the OR keyword. Notice the system is not case sensitive. If you want data for all the schools in a district, enter the least number of characters to uniquely identify the district name in the Portion of District Name textbox. If more schools are returned than you wanted, you can adjust the school or district names based on the result. Use double quotes to group two or more words together as a phrase in the search.

Select **Sacramento** in the **High School County** drop-down (see figure 3). There are additional filter options which won’t be used but should be mentioned.

- **High School Location** defaults to **Only California High Schools**. Students from unknown counties and out of state or country students are NOT included.
- **Filter By College** should be set to **Include Only High Schools that Sent Students Defined Above** when a specific college is defined, or identified. This will limit the count of high school graduates to high schools that sent students to the specific college. Otherwise, the count will include all high schools in the state!
- **School Type** will limit the results based on the type of school such as a Public Alternative School. Note there are ten school type groupings such as **Any Public School**. These provide the most frequently used combinations.

Include only Students from High Schools that match the following criteria:

Portion of High School Name:

Portion of District Name:

High School Location: ☒ Only California High Schools
☐ Any High School Including Unknown
(Do Not Include High School Graduates or A-G Completions)

Filter By College: ☐ Include Only High Schools that Sent Students to Colleges Defined Above
☒ Include All High Schools Regardless of College Enrollment

High School Region [glp](#):

High School County [p](#):

School Type [p](#):
[List of school types](#) included in the ten groups.

Figure 3

We have everything we need for our report. The additional options are self explanatory. Study them and try them out if you'd like. When you are ready, scroll to the bottom of the page and click the **Generate Report** button.

A new browser window will open. The first section shows which report was generated, the criteria used in the report and date/time of the report. Save this information. If you have any problems or questions with the report, you can e-mail this information to us and we can use it to recreate the report.

Next, you will see some general information and the line **Retrieving data...Done**. Look for this line. If it says something other than "**Done**", your report did not complete properly. In this case, try again or contact us for assistance.

More general information is displayed followed by the Download section. We'll chat more about this in a moment. Below the Download section is the report. Note the two Hiram Johnson campuses and the formatting of their names. This is the reason why we used a minimal, partial name.

Let us look at part of the report in greater detail (Figure 4) and read what it says. In Spring, 2005 (the most recent year), 430 high school students graduated from Hiram Johnson High School in Sacramento County. In Fall, 2005:

- 12 students attended a UC campus
- 59 students attended a CSU campus
- 189 students attended a CCC campus
- $12 + 59 + 189 = 260$ students attended a public California higher education campus

Note: There is no longitudinal component between the high school data and the college data. Although we attempt to approximate recent high school graduates in the First-Time Freshmen data, some students may be missed.

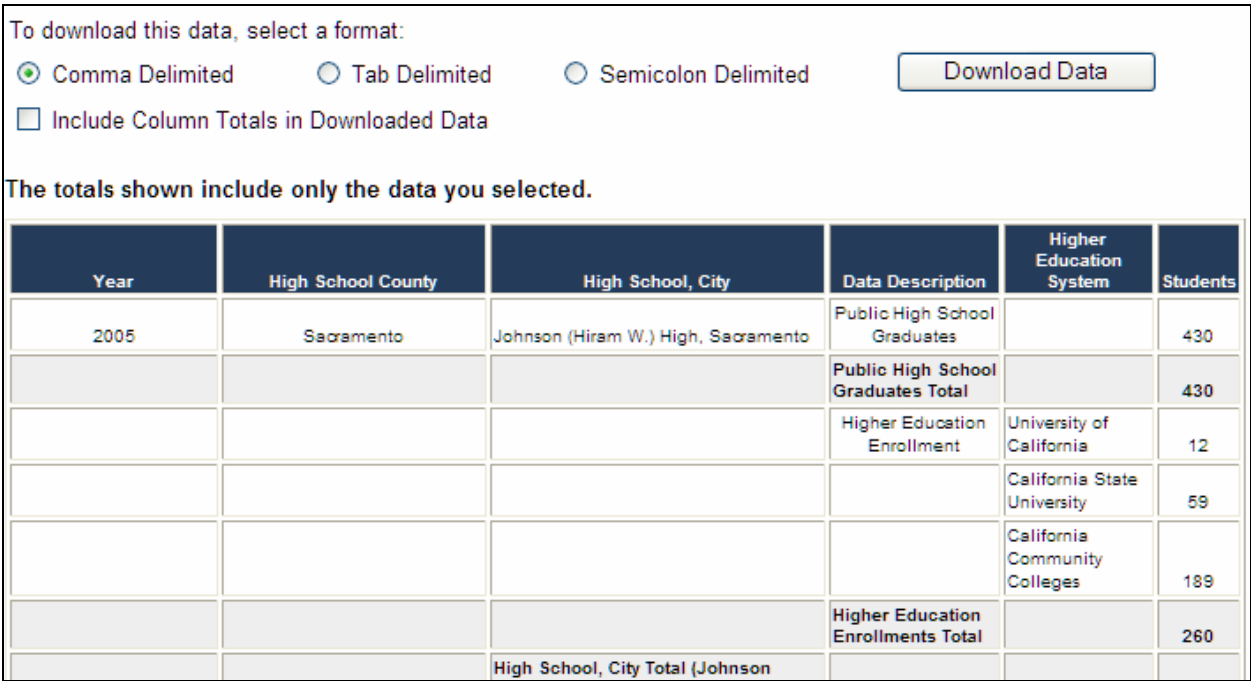


Figure 4

I want more!

We are done with the initial request, but now we will ask for additional information, download the data, open it in Excel and create a pivot table. First, take a look at the Download section of the report. It looks like the top of Figure 4. Go ahead and close this browser window and go back to the browser window that has our Final Options. We will ask for one additional item in the **Select Final Options** webpage. Scroll up to the **Aggregate (Group) Data By:** section and check the **Student’s Ethnicity** checkbox. Scroll to the bottom and click the **Generate Report** button.

A new browser window opens with the data. Several additional columns appear in the report for each ethnicity (see figure 5). Also note the additional download options. We want to create a pivot table in Excel when we download it, so check the **Don’t Crosstab Downloaded Data** checkbox. We recommend using this option whenever you work with data by ethnicity. It provides the best flexibility.

To download this data, select a format:

☒ Comma Delimited
 ☐ Tab Delimited
 ☐ Semicolon Delimited
 Download Data

☐ Include Row Totals in Downloaded Data
☐ Include Column Totals in Downloaded Data
☒ Don't Crosstab Downloaded Data, Put Each Ethnicity on a Separate Line
 (Use this option if you need greater flexibility for manipulating the data.)

The totals shown include only the data you selected.

Year	High School County	High School, City	Data Description	Higher Education System	Asian/ Pac Is	Black	Filipino	Latino	Nat Amer	Other	White	NonRes Alien	No Response	Totals
2005	Sacramento	Johnson (Hiram W.) High, Sacramento	Public High School Graduates		150	75	7	89	7	0	100	0	2	430
			Public High School Graduates Total		150	75	7	89	7	0	100	0	2	430
			Higher Education Enrollment	University of California	8	1	0	0	0	0	2	0	1	12
				California State University	34	7	2	2	0	0	10	0	4	59
				California Community Colleges	74	24	4	39	1	7	29	0	11	189
			Higher Education Enrollments Total		116	32	6	41	1	7	41	0	16	260
		High School, City												

Figure 5

Click the Download Data button and save the file to your computer. Note the suffix is a .CSV file. This stands for Comma Separated Values. It is a common format easily recognized by Excel and other programs. Save the file somewhere convenient. After it downloads, open the file. Microsoft Excel will start and display the data. Note: any value that looks like a number will convert to a number in Excel. This creates two issues:

- Leading zeros will be lost in CDS codes and CIP codes.
- Large numbers might be converted to scientific notation.

This is not a problem in most reports. For further information see Working with Downloaded Data (<http://www.cpec.ca.gov/OnLineData/DownloadHelp.asp>).

Note the contents of cell A1. It contains HTML coding and a description of the downloaded file. We do not require it so press the delete key.

Expand the columns to see the information more clearly.

We do not require the **Ethnic Code** (column F), so highlight the column and delete it.

Highlight the column labeled **Higher Education System** (column E). Press Ctrl + H (or click Edit, Replace) to bring up the Find and Replace dialog. On the Find What: line enter ** **; and on the Replace with: line enter **<space>High School Graduates** (see Figure 6). Be sure to add the leading space. Now click on the **Replace All** button. Note the changes under Higher Education System in column E.

C	D	E	F	G
City	Data Description	Higher Education System	Ethnicity	Students
iram W.) High, Sacramento	Public High School Graduates	 	Asian/Pac	150
iram W.) High, Sacramento	Public High School Graduates	 	Black	75
iram W.) High, Sacramento	Public High School Graduates	 	Filipino	7
iram W.) High, Sacramento	Public High School Graduates	 	Latino	89
iram W.) High, Sacramento	Public High School Graduates	 	Nat Amer	7
iram W.) High, Sacramento	Public High School Graduates	 	White	100
iram W.) High, Sacramento	Public High School Graduates	 	No Respor	2
iram W.) High, Sacramento	Higher Education Enrollment	University of California	Asian/Pac	8
iram W.) High, Sacramento	Higher Education Enrollment	University of California	Black	1
iram W.) High, Sacramento	Higher Education Enrollment	University of California	White	2
iram W.)			ia	No Respor
iram W.)			ersity	Asian/Pac
iram W.)			ersity	Black
iram W.)			ersity	Filipino
iram W.)			ersity	Latino
iram W.)			ersity	White
iram W.)			ersity	No Respor
iram W.)			y Colleges	Asian/Pac
iram W.)			y Colleges	Black
iram W.)			y Colleges	Filipino
iram W.)			y Colleges	Latino
iram W.)			y Colleges	Nat Amer
iram W.)			y Colleges	Other
iram W.)			y Colleges	White

Find and Replace

Find

Replace

Find what:

Replace with:

High School Graduates

Space

Options >>

Replace All

Replace

Find All

Find Next

Close

Figure 6

If you want (optional), change the heading name from Higher Education System to Education System. Column B, High School County and column D, Data Description, are not required, so highlight each column and delete it. Click on cell A1 to deselect any highlighted cells. The spreadsheet should look (more or less) like Figure 7.

	A	B	C	D	E
1					
2	Year	High School, City	Higher Education System	Ethnicity	Students
3	2005	Johnson (Hiram W.) High, Sacramento	High School Graduates	Asian/Pac	150
4	2005	Johnson (Hiram W.) High, Sacramento	High School Graduates	Black	75
5	2005	Johnson (Hiram W.) High, Sacramento	High School Graduates	Filipino	7
6	2005	Johnson (Hiram W.) High, Sacramento	High School Graduates	Latino	89
7	2005	Johnson (Hiram W.) High, Sacramento	High School Graduates	Nat Amer	7
8	2005	Johnson (Hiram W.) High, Sacramento	High School Graduates	White	100
9	2005	Johnson (Hiram W.) High, Sacramento	High School Graduates	No Respor	2
10	2005	Johnson (Hiram W.) High, Sacramento	University of California	Asian/Pac	8
11	2005	Johnson (Hiram W.) High, Sacramento	University of California	Black	1
12	2005	Johnson (Hiram W.) High, Sacramento	University of California	White	2
13	2005	Johnson (Hiram W.) High, Sacramento	University of California	No Respor	1
14	2005	Johnson (Hiram W.) High, Sacramento	California State University	Asian/Pac	34
15	2005	Johnson (Hiram W.) High, Sacramento	California State University	Black	7
16	2005	Johnson (Hiram W.) High, Sacramento	California State University	Filipino	2
17	2005	Johnson (Hiram W.) High, Sacramento	California State University	Latino	2

Figure 7

The Pivot Table

Make sure you are in cell A1. Click on the Data menu next to the Tools menu in Excel. Scroll down and select PivotTable and PivotChart Report... The PivotTable dialog box opens. Microsoft Excel should be selected at the top and PivotTable should be selected near the bottom. Click Finish. A new, blank spreadsheet opens along with a dialog box and a PivotTable floating tool bar. The dialog box is titled PivotTable Field List. Note the areas of the spreadsheet labeled:

Drop Column Fields Here
 Drop Row Fields Here
 Drop Data Items Here

Drag the **Higher Education System** icon from the dialog box to the shaded area for the column fields on the spreadsheet and release it.

Drag the **High School, City** icon from the dialog box to the shaded area for the row fields on the spreadsheet and release it.

Drag the **Ethnicity** icon from the dialog box directly to the high school names on the spreadsheet and release it.

Drag the **Students** icon from the dialog box to the shaded area for the data items in the middle of the spreadsheet and release it.

Remember the space that was entered before “**High School Graduates**”? It was done for sorting purposes. That leading space puts the High School Graduates in the first column or row

within the **Higher Education System** category. If the leading space is not there, **High School Graduates** will appear between **CSU** and **UC**. The downloaded Students will always reside in the area for the data items. The other elements can reside in your choice of a column field or row field. The pivot table and pivot chart are useful tools in Excel. More information can be found in the Excel help.

Summary

This is a small sample of what can be accomplished with the CPEC Customized Reports System. Spend some time exploring the other options and reports. If you see something you would like added or changed, let us know. Most of the improvements have started from user comments. If you need help, send an e-mail to Data_Request@cpec.ca.gov.